Nimustine (ACNU) plus teniposide (VM26) in recurrent glioblastoma

M Glas, Thomas Hundsberger, M Stuplich, D Wiewrodt, D Kurzwelly, B Nguyen-Huu, K Rasch & U Herrlinger

BACKGROUND: In a previous trial (NOA-01), the combination of nimustine and teniposide showed efficacy in previously untreated glioblastoma (GBM). After establishing temozolomide as standard first-line therapy in GBM patients, the nimustine (ACNU)/teniposide (VM-26) combination has been employed as salvage chemotherapy for recurrent GBM. However, data on the toxicity and efficacy of this regimen in recurrent GBM are lacking.

METHODS: In two neurooncological centers, all patients with recurrent GBM treated with nimustine (90 mg/m², day 1/42) and teniposide (45-70 mg/m², days 1-3/42) were analyzed retrospectively for progression-free survival (PFS), overall survival (OS) and toxicity. RESULTS: Thirty-five patients (median age 51 years, range 25-71 years) were identified. Six months after chemotherapy initiation, PFS was 29% and the median OS 6 months; 23% of patients were alive ≥ 1 year after initiation of nimustine-teniposide chemotherapy. Grade 4 hematotoxicity was observed in 12 of 35 patients (34%) and in 14 of 83 evaluable chemotherapy courses (17%).

CONCLUSIONS: The benefit of the nimustine-teniposide combination is moderate in patients with recurrent GBM. The data support the efficacy of the nimustine-teniposide chemotherapy, but the rate of high-grade hematotoxicity is increased.

type: journal paper/review (English)
date of publishing: 0-2009
journal title: Oncology (76/3)
ISSN electronic: 1423-0232
pages: 184-9